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DURUM WHEAT



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QUALITY REPORT

Physical, Chemical, Milling, and Macaroni Characteristics

1972 CROP

30
UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
NORTH CENTRAL REGION

and
NORTH DAKOTA AGRICULTURAL EXPERIMENT STATION
DEPARTMENT OF CEREAL CHEMISTRY & TECHNOLOGY



UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
in cooperation with
STATE AGRICULTURAL EXPERIMENT STATIONS

The ~~cooperative investigation~~ QUALITY EVALUATION OF DURUM WHEAT VARIETIES
~~the varietal plot and yield nursery results with these durum~~
~~tests in 1972 were as follows:~~ 1972 CROP^{1/}

by

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1/ This is a progress report of cooperative investigations containing some results that have not been sufficiently confirmed to justify general release; interpretations may be modified with additional experimentation. Confirmed results will be published through established channels. The report is primarily a tool for use of cooperators and their official staffs and to those persons having direct and special interest in the development of agricultural research programs.

This report was compiled by the Agricultural Research Service, U.S. Department of Agriculture. Special acknowledgment is made to the North Dakota State University for their facilities and services provided in support of these studies. The report is not intended for publication and should not be referred to in literature citations or quoted in publicity or advertising. Use of the data may be granted for certain purposes upon written request to the agency or agencies involved.

COOPERATING AGENCIES, STATIONS, AND PERSONNEL

The cooperating agencies, stations, and personnel conducting the varietal plot and nursery experiments concerned with these durum tests in 1972 were as follows:

California Agricultural Experiment Station:

Davis, and Tulelake: Y. P. Puri, and C. O. Qualset

Minnesota Agricultural Experiment Station:

Crookston: R. E. Heiner*, and L. S. Smith

Montana Agricultural Experiment Station:

Belgrade, Creston, Havre, Huntley, Moccasin, and Sidney: F. H. McNeal*, M. A. Berg*, R. T. Harada, and G. P. Hartman

North Dakota Agricultural Experiment Station:

Fargo, Langdon, and Williston: E. French, L. Joppa*, R. Nowatzki, and J. Quick

Oregon Agricultural Experiment Station:

Pendleton: W. H. Foote, J. T. McDermid, and C. R. Rohde

South Dakota Agricultural Experiment Station:

Selby: J. J. Bonnemann, R. W. Pylman, and W. D. Stegmeier

Washington State University:

Ellensburg, Pullman, and Royal Slope: C. F. Konzak, M. A. Davis, and E. Donaldson.

* ARS Employees

INTRODUCTION

This, the eleventh annual Durum Wheat Quality Report, is for the 1972 crop. Samples of standard varieties and new strains of durum wheat grown in cooperative experiments in the durum wheat region of the United States^{2/} were milled and evaluated by the Hard Red Spring and Durum Wheat Quality Laboratory in cooperation with the Department of Cereal Chemistry and Technology on the campus of North Dakota State University at Fargo, North Dakota. The evaluation of some of the durum wheats is integrated with the work done by the Department of Cereal Chemistry and Technology of North Dakota State University. Methods and techniques are described in detail in the text of the report.

Where sufficient quantity of sample was available for macro processing, the semolina was processed into spaghetti to determine the quality characteristics. When the quantity of semolina was insufficient (micro quantity), only the dry slick test was employed. A randomly selected series of 180 samples which included the complete range of slick color scores, was processed into spaghetti for the study comparing dry slick and spaghetti color scores.

In previous years the mixogram and farinogram value was given for the samples tested. However, because the test was time consuming and of little consequence in the outcome of the general evaluation, it was abandoned.

The purpose of this report is to make available to cooperators the quality data on standard varieties and new strains of durum wheat from the 1972 crop.

The relatively new procedures adopted in this report are more fully described under the Milling, Color Score, Dry Slick Color Score, Spaghetti Processing, and Tenderness Score in the Methods Section. A statistical study of the results, comparing the dry slick method and other established evaluation methods was given in the section of Statistical Study of the Dry Slick Color Score in the 1963 report (CR-59-64). The same method as last year was used to grind the samples, using a Buhler^{3/} experimental mill and two Miag^{3/} laboratory purifiers to process the macro samples of durum wheat.

^{2/} Heiner, R. E. "Results on Spring Wheat Varieties Grown in Cooperative Plot and Nursery Experiments in the Spring Wheat Region in 1972." Agricultural Research Service, U.S. Department of Agriculture.

^{3/} Mention of a trademark name or proprietary product does not constitute a guarantee or warranty of the product by the U.S. Department of Agriculture, and does not imply its approval to the exclusion of other products that may also be suitable.

SOURCE OF THE SAMPLES

Six hundred and eleven samples were received from seventeen stations in seven states--California, Minnesota, Montana, Oregon, North Dakota, South Dakota, and Washington--for durum wheat quality tests. Approximately 10% of the samples tested were the named commercial varieties of Hercules, Lakota, Leeds, Rolette, Sentry, Wandell, Ward, Wascana, and Wells. The remaining samples were either new varieties or samples received from a special test for quality evaluation.

Eighty-five Advanced Yield Nursery samples were received: sixteen from one station in California (Tulelake); sixteen from six stations in Montana (Belgrade, Creston, Havre, Huntley, Moccasin, and Sidney); nineteen from one station in Oregon (Pendleton); and thirty-four from two stations in Washington (Ellensburg and Royal Slope).

Twenty-three Field Plot Nursery samples were received; seven samples from one station in California (Davis), and sixteen samples from one station in North Dakota (Williston).

Twenty International Yield Nursery samples were received from the Pullman, Washington station.

One hundred and seventy-three Preliminary Yield Nursery samples were received: one hundred and twenty-four from the Tulelake, California station; and forty-nine from the Pullman and Royal Slope, Washington stations.

One hundred and forty-four Special Nursery samples were received from Davis, California; Crookston, Minnesota; and Pullman and Royal Slope, Washington.

One hundred and sixty-six samples were Uniform Regional Nursery samples grown at the Crookston, Minnesota station; Sidney, Montana station; Fargo, Langdon, and Williston, North Dakota stations; Selby, South Dakota station; and Royal Slope, Washington station.

The durum wheats which are included in the Uniform Regional Nursery 1972 Trials are listed on Page 5. The cross or variety, the C.I. number or state selection number, and the station which developed the variety are given.

UNIFORM REGIONAL DURUM NURSERY

Entry No.	Cross or Variety	C.I. or Sel. No.	Year Entered	Origin
1	Mindum	5296	1929	Minnesota
2	Wells	13333	1957	N.Dak.-USDA
3	Leeds	13768	1963	"
4	Hercules	14559	1966	Canada
5	Wascana	15280	1968	"
6	Rolette	15326	"	N.Dak.-USDA
7	Ward	15892	1969	"
8	6062/6142	D6676	"	"
9	"	D6721	1970	"
10	"	D6722	"	"
11	Ldn*2/St464//Lds	D6714	"	"
12	"	D6715	"	"
13	561/Lds	D6733	"	"
14	Lds/RL3601	D6761	"	"
15	Lk*2/Pelissier	DT316	1968	Canada
16	RL3607/DT182	DT332	1972	"
17	561/Lds	D692	"	N.Dak.-USDA
18	Lds/DT310	D6915	"	"
19	Lds//61130/Lds	D6962**	"	"
20	65150/65151	D6973 <u>1</u> /	"	"
21	61130/Lds//6148	D7057**	"	"
22	Rlt/6645	D70101	"	"
23	62220/57114/Lds	D7075 <u>1</u> /	"	"
24	Lds/Hc	D7067	"	"

** Semidwarfs

1/ Medium Height

METHODS

The methods used in the testing of the samples were essentially the same as given in last year's report, with the addition of some new tests and interpretations of the tests, as well as deletions.

Briefly, the following methods and terminologies were applied:

Test Weight Per Bushel - The weight per Winchester bushel of dockage-free wheat.

Thousand Kernel Weight - The 1000 kernel weight was determined by counting the number of kernels in a 10 g. sample of cleaned, picked wheat on an Asco Seed Counter^{3/}.

Kernel Size - The percentage of the size of the kernels (large, medium, and small) was determined on a wheat sizer as described by Shuey^{4/}.

The sieves of the sizer were clothed as follows:

Top Sieve	-	Tyler # 7 with 2.92 mm. opening
Middle Sieve	-	Tyler # 9 with 2.24 mm. opening
Bottom Sieve	-	Tyler #12 with 1.65 mm. opening

Milling - The samples were cleaned by passing the wheat over an Emerson Kicker and Dockage Tester^{3/} and through a modified Forster Scourer Model 6 ^{3/}. The clean dry samples were pre-tempered to 12.5% for at least 72 hours prior to any additional tempering before milling.

The field plot and large advanced yield nursery samples were milled on a Buhler^{3/} experimental mill specially designed for milling durum wheat. The mill is equipped with corrugated rolls throughout and the semolina purified on a Miag^{3/} laboratory purifier. All of the stock is handled pneumatically. A flow diagram for the mill is shown on Page 11. The clean dry wheat was tempered in three stages: first to 12.5% moisture at least 72 hours prior to the second stage which is to add an additional 2.0% for 18 hours to give a cumulative moisture of 14.5%, then a final temper of 3.0%, 45 minutes prior to milling.

The small samples were milled on a modified Brabender Quadrumat Jr.^{3/} mill. The #2 roll with 26 corrugations per inch is replaced with #1 roll with 13 corrugations per inch. The #3 and #4 rolls are

4/ Shuey, William C. A Wheat Sizing Technique for Predicting Flour Milling Yield. Cereal Sci. Today 5: 71-72,75 (1960).

replaced with #2 rolls. The pre-tempered wheat is tempered overnight to 15.5% moisture content before milling. The ground meal is sifted for seven seconds on a Roto-matic^{3/} sifter equipped with 30 W and 100 W sieves. The overs of the 30 W is bran, the thrus of the 100 W is flour, and the middle cut-over 100 W and thru 30 W is the unpurified semolina. The purified semolina is obtained by introducing unpurified semolina into Purifier #1 of the Buhler^{3/} Mill flow (Page 12), but the tailings for Purifier #1 are not recycled. The purified semolina is used in testing the quality of semolina.

Protein Content - The protein was calculated by multiplying by the factor of 5.7, the percent nitrogen, as determined by the standard Kjeldahl procedure.

Mineral Content or Ash Content - This was determined by measuring the residue of the minerals left after incinerating the sample for approximately 16 hours at 600°C. The results were reported as percentage of the sample which was incinerated.

Absorption - This was the water, expressed as percent of the semolina, required to bring the dough to the proper consistency.

All values (protein, ash, absorption) are reported on a 14% moisture basis.

MACRO Spaghetti Processing - Spaghetti was processed on a semi-commercial scale pasta extruder (DEMACO)^{3/}. The control as well as sprouted durum was processed with the following extruding conditions:

Temperature 49.5°C.
Rate 12 r.p.m.
Absorption 30%
Vacuum 18 in. Hg

These were the optimum conditions for processing spaghetti, which were calculated by the linear programming technique.

To process the pasta, 1000 g. batch^{5/} was premixed by slowly adding the water and mixing at slow speed for approximately 30 seconds, and high speed for 10 seconds, then add the remainder of the water at slow speed in a Hobart C-100-T^{3/} mixer equipped with a Pastry Knife Agitator. After all of the water has been added, the semolina and water are blended at high speed for 30 seconds; the mixer was stopped to scrape down the sides of the bowl and the blending

5/ Weight was determined as follows:

$$\left(\frac{100-m_1}{100-m_2} - 1 \right) \left[W - W \left(\frac{m_2-m_1}{m_2} \right) \right] = \text{Amount H}_2\text{O added}$$

where:

m_1 = original moisture
 m_2 = desired moisture
 W = desired amount of sample

continued for 90 seconds more to complete the premix stage. The premixed pasta was then transferred to the vacuum mixer of the press and extruded through an 84-strand 0.043 inch teflon spaghetti die. A jacketed extension tube (9 $\frac{1}{4}$ " long x 1-3/4" inside diameter) was attached to the semi-commercial pasta extruder to allow more time for hydration of the semolina and minimize the number of white specks (unhydrated semolina) in the spaghetti. Extrusion temperature was controlled by a circulating water bath.

MICRO Spaghetti Processing - Thirty grams of semolina were mixed with water to form a stiff dough, pressed into spaghetti and dried. The equipment and procedure have been described by Harris and Sibbitt^{6/} and Fifield^{7/}.

Spaghetti Drying - Spaghetti was dried in an experimental pasta dryer for an 18 hour cycle as described by Gilles, Sibbitt, and Shuey^{8/}. During the drying period, the humidity of the dryer was decreased linearly from 95% to 60% R.H. and the temperature was held constant at 100°F.

Color Score - The color of the spaghetti or semolina has been generally accepted as the most important single grading factor. A deep amber or golden color is the most preferable. The amount of yellow pigmentation determines the extent or degree of amberness.

Samples which have a color rating 2 points below the standard spaghetti score or 10 points below the standard slick color score are unsatisfactory. It is possible that the average color score for a crop year may be higher or lower than average, therefore, this would be taken into consideration when giving the overall rating of a variety over a number of years. A sample may receive a low rating for reasons other than a deficiency of yellow pigmentation such as: D - Dullness; G - Grayness; R - Redness; B - Branny; W - White Cast or Chalkiness; and S - Speckiness, or a combination of these factors. The sample will be rated accordingly with the exception of the intensity, quantity, and depth of the yellow pigmentation.

6/ Harris, R. H., and Sibbitt, L. D. Experimental Durum Milling and Processing Equipment with Further Quality Studies on North Dakota Durum Wheats. Cereal Chem. 19: 388-402 (1942).

7/ Fifield, C. C. Experimental Equipment for Manufacture of Alimentary Pastes. Cereal Chem. 11: 330-334 (1934).

8/ Gilles, K. A., Sibbitt, L. D., and Shuey, W. C. Automatic Laboratory Dryer for Macaroni Products. Cereal Sci. Today 11: 322-324 (1966).

The following grading system has been adopted for scoring the color of spaghetti and semolina relative to the standard color score:

<u>COLOR SCORE</u>		
<u>Spaghetti</u>	<u>Dry Slick</u>	<u>Description</u>
2.0 above	10 above	Much deeper and intense yellow pigmentation than standard.
1.0 above	5 above	Deeper and more intense yellow pigmentation than standard.
Equal to Standard	Equal to Standard	Standard quality, depth, and intensity of yellow pigmentation.
0.5 below	2 below	Slightly less depth and intensity, but sufficient quantity of pigmentation.
1.0 below	5 below	Slightly less quantity as well as depth and intensity of pigmentation than the standard, but still sufficient to be rated satisfactory on the basis of color.
2.0 below	10 below	Sufficiently less quantity of yellow pigmentation than the standard to give a pale yellow color and graded unsatisfactory for color score.

The numerical rating describes the depth or amount of pigmentation. In cases where a sample is graded down because of off-color, speckiness, etc., the designation is shown by a letter abbreviation following the numerical score. For example: 60-W would indicate the sample was chalky white with little or no yellow pigmentation; 80-D would indicate that the sample had some yellow pigmentation, but was dull.

Dry Slick Color Score - This is determined by slicking the sample with a standard of known color rating and comparing the two.

Spaghetti Color - The spaghetti color scores were determined on a Model D 25 Hunter Color Difference Meter^{3/} equipped with a D 25 A optical unit. The specimen area (2 in. diameter) was covered with straight spaghetti strands and readings were taken against a black background with 0% reflectance. Color difference values (L%, a%, and b%) were measured for all the spaghetti samples by the method of Walsh, Gilles, and Shuey^{9/}. A uniform chromaticity chart was used for determining spaghetti color scores.

Cooking Characteristics of Spaghetti -

a. Cooking Procedure

A modification of the method of Sheu *et al.*^{10/} was adapted to determine cooking quality of spaghetti used in this study. Spaghetti (10 g.) which had been broken into lengths of approximately 5 cm., was placed into 300 ml. of boiling distilled water in a 500 ml. beaker. After 20 minutes cooking, the samples were washed thoroughly with distilled water in a Buchner funnel and allowed to drain for 2 minutes. The cooking water as well as the washing solution was collected in pre-weighed 250 ml. beakers.

b. Tenderness Score

Four strands of cooked spaghetti were placed on a plexiglass plate and sheared at a 90° angle with a special plexiglass tooth. A continuous recording of distance versus force was made by the instrument during the operation. An automatic integrator was used to calculate the area under the curve (g. cm.) which was the amount of work required to shear the cooked spaghetti. To measure firmness, the average of two integrator scores was used, and the average work to shear was used as a measure of spaghetti firmness. The firmness score was read directly from the integrator value. The higher the value, the firmer the spaghetti. A value of approximately 5 appears to be preferential.

Calculations were as follows:

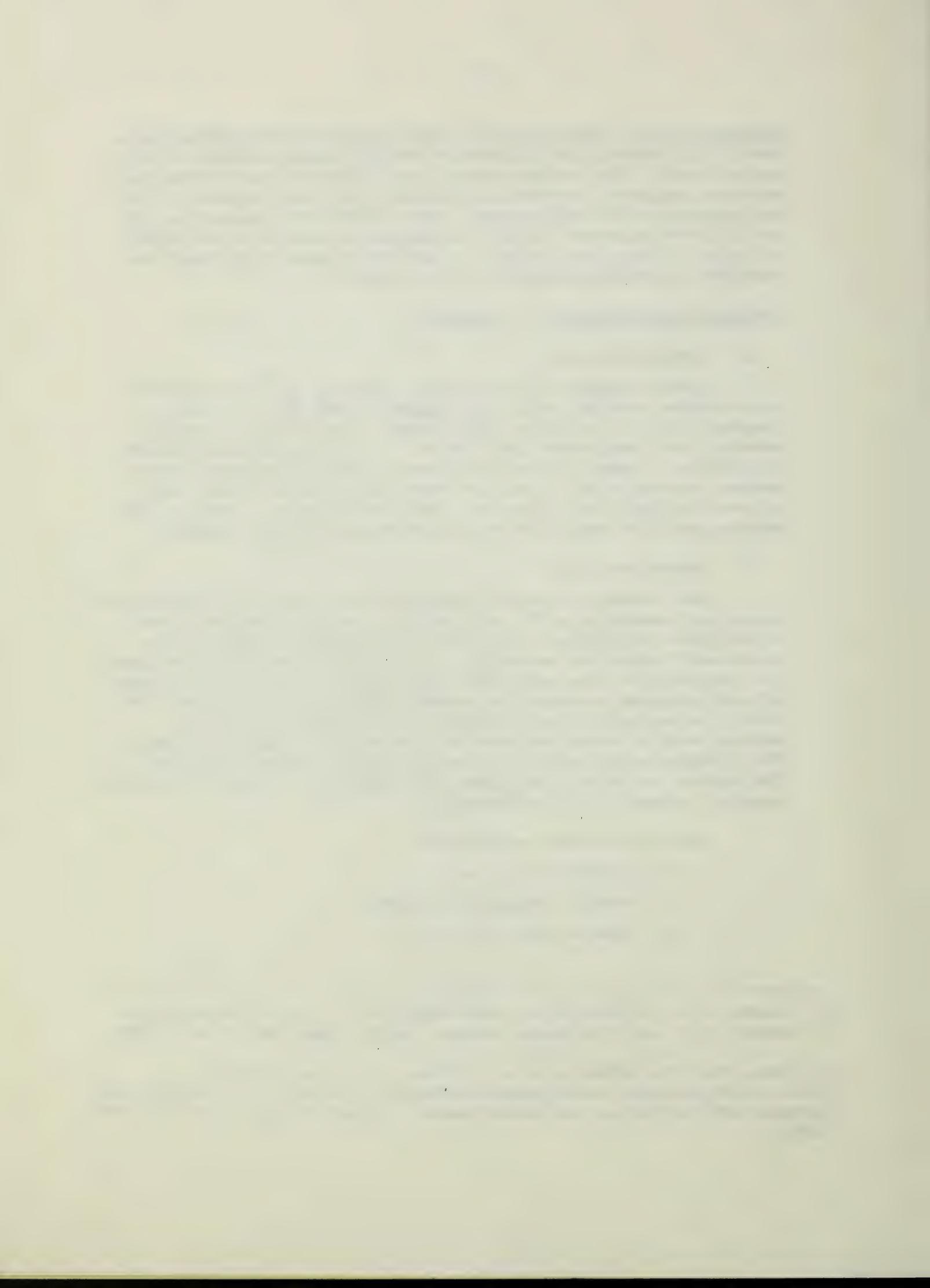
$$E = 0.0199 \times A \text{ (g. cm.)}$$

A = Average integrator reading

E = Area of curve in g. cm.

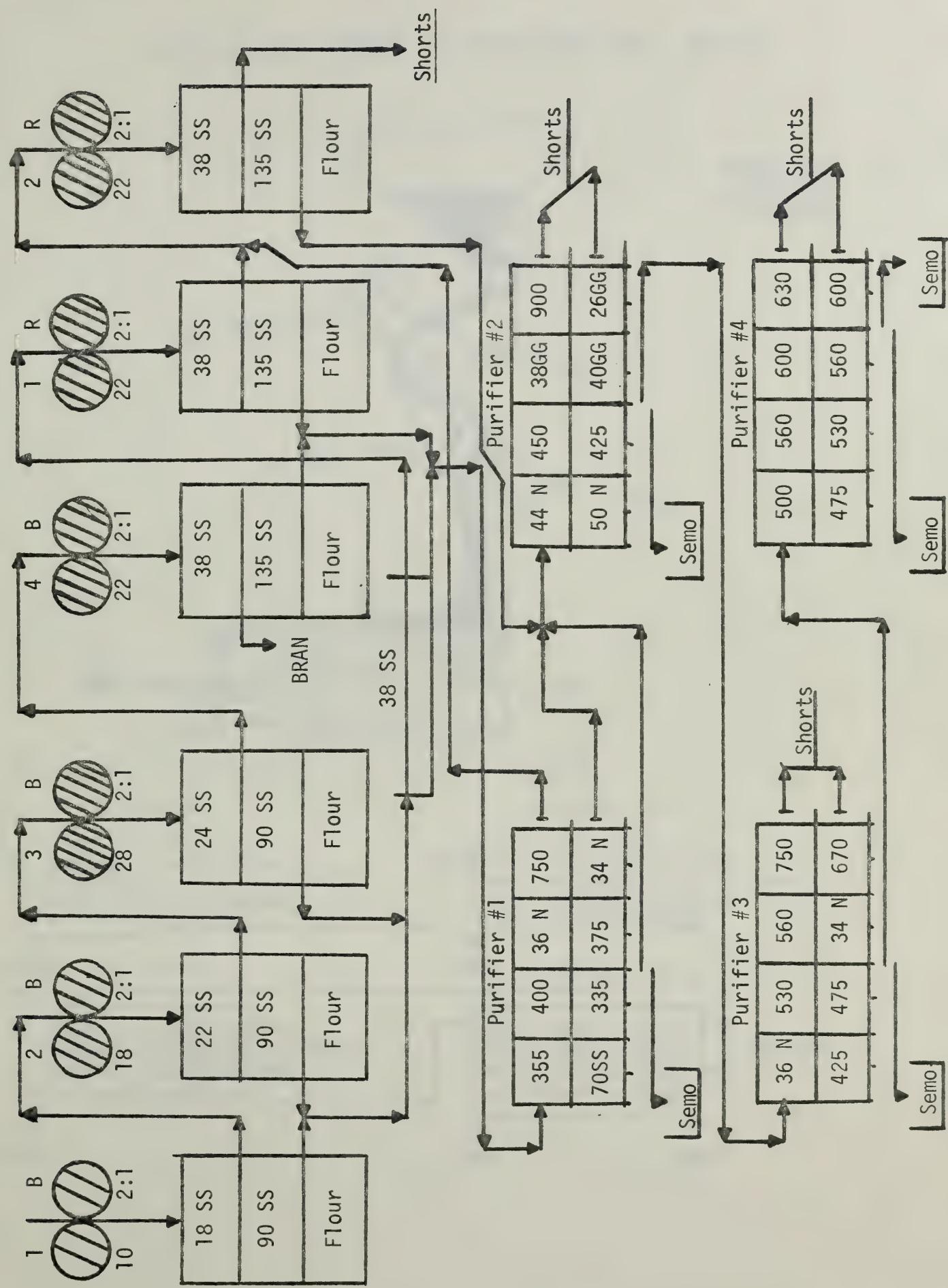
^{9/} Walsh, D. E., Gilles, K. A., and Shuey, W. C. Color Determination of Spaghetti by the Tristimulus Method. *Cereal Chem.* 46: 7-14 (1969).

^{10/} Sheu, Ruey-yi, Medcalf, D. G., Gilles, K. A., and Sibbitt, L. D. Effect of Biochemical Constituents on Macaroni Quality. I. Differences between Hard Red Spring and Durum Wheats. *J. Sci. Fd. Agr.* 18: 237-239 (1967).

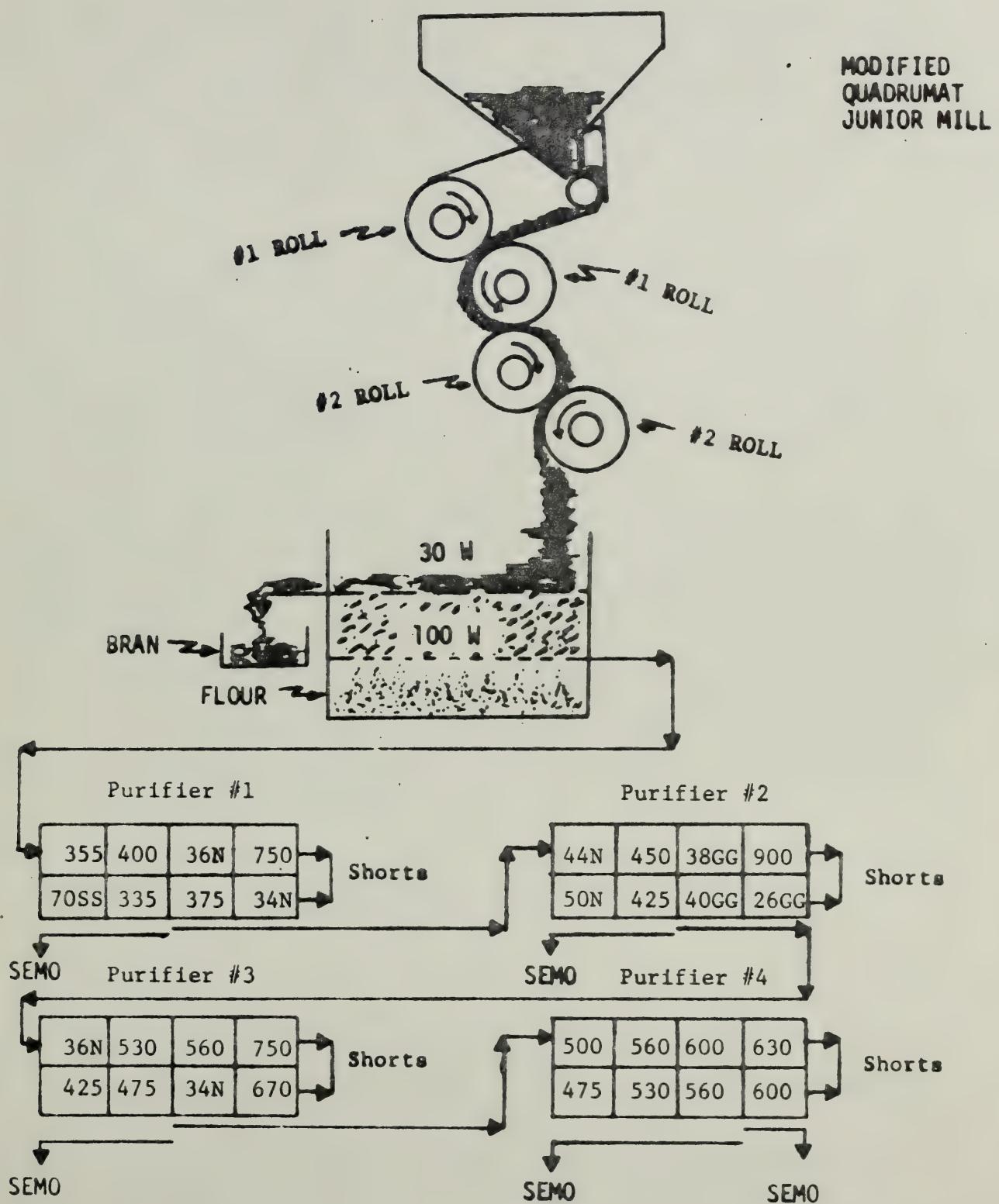


FLOW DIAGRAM FOR LARGE DURUM WHEAT SAMPLES

TEMPERED
WHEAT



SCHEMATIC FLOW DIAGRAM FOR SMALL DURUM WHEAT SAMPLES



EXPERIMENTAL RESULTS

The results obtained for the 1972 crop of durum wheat samples are tabulated and presented in the following order: Table 1 - Results for the Durum Standard Blend (both Macro and Micro results); Tables 2 through 6 - Advanced Yield Nursery Samples; Tables 7 and 8 - Field Plot Nursery Samples; Table 9 - International Yield Nursery Samples; Tables 10 through 14 - Preliminary Yield Nursery Samples; Table 15 through 18 - Special Nursery Samples; and Tables 19 through 25 - Uniform Regional Nursery Samples.

None of the samples tested showed signs of sprout damage, although some samples did exhibit weathering, blackpoint or green kernels. Table 1 is provided for comparative results for nursery samples where a standard was not furnished and the corresponding macro or micro data for the 1972 Durum Standard were used, depending on the size samples processed. Also the data for the Durum Standard are comparable to the North Dakota 1972 durum crop average and may be used for comparing samples grown in nurseries in different areas and environmental conditions to the bulk of the U.S. durum crop.

Only a limited number of randomly selected samples were processed into spaghetti, except the large macro samples or those in which plant breeders had an interest in evaluating. The limited number of samples processed into spaghetti was based on the results of two studies which were conducted on the durum samples:

1. A study involving over 400 samples from two crop years has indicated that the dust color score can reasonably predict the spaghetti color score within a half a point which is within the range of duplication. A correlation coefficient of 0.8 was found between the dust color score and the spaghetti color score.
2. The lipoxidase activity of the present varieties and selections is sufficiently low and does not adversely effect the color when processing the semolina into spaghetti.

These general comments could also be made regarding the processing of the micro samples:

1. There is no apparent relation between absorption and protein that one would anticipate from past experience.
2. It was noted that for some of the samples the extruding pressure dropped rather than increasing slightly during the extrusion.

3. The samples when handled during kneading did not relate to the touch of the operator the anticipated extrusion pressure.
4. At least one-third of the semidwarf samples did not respond to the absorption correction factor of 0.1 ml./25 lb. pressure. Also, it was unpredictable as to the direction of the correction factor, since some of the samples would over-correct and others under-correct with changes in absorption.

ADVANCED YIELD NURSERY SAMPLES

California (Table 2). Sixteen advanced yield nursery samples were received from the Tulelake, California station. Three of these samples were the named varieties, Capeti, Leeds, and Wandell. The Wandell sample had minimum color score. Selections M680 0136, 71-179, 71-189, and 71-349 showed no promise as new varieties with very low and poor color scores. Selections M680 0116, M680 0127, ND 64107, ND 65023, and ND 66151 showed little promise as new varieties having low color scores; however, Selection M680 0127 showed good promise last year. Selections M680 0143, ND 66074, and 71-357 showed some promise as new varieties. Only Selection K680 0707 showed good promise from these samples.

Montana (Table 3). Sixteen advanced yield nursery samples were received from six Montana stations -- Belgrade, Creston, Havre, Huntley, Moccasin, and Sidney. These samples were comprised of the two named varieties, Leeds and Wells, for all stations; while the samples from Belgrade were on fertilized and nonfertilized ground, and the Sidney samples were grown on both dryland and irrigated ground. The fertilized samples from Belgrade showed consistently higher protein and better color than the nonfertilized samples. The Creston samples showed some ergot and green kernels. The Sidney samples showed no definite pattern for the characteristics other than slightly lower protein for the irrigated samples versus the dryland samples.

Oregon (Table 4). Nineteen advanced yield nursery samples were received from the Pendleton, Oregon station. Thirteen samples were from the Oregon Western Advanced Irrigated Durum Nursery and six samples from the Regular Advanced Yield Nursery. For the irrigated samples, four were the named varieties, Capeti, Gerondo, Leeds, and Wandell. Approximately one-half of the samples exhibited yellowberry kernels. The MD00 0136 and ND 65023 showed little promise, exhibiting very poor color. Selections M680 0143, ND 64107, and ND 66151 showed little promise, having low color values. Selections M680 0166 and ND 66074 showed some promise as new varieties but having minimum color scores. Selections K680 0707 and M680 0127 showed good promise as new varieties. For the regular advanced

yield nursery samples, three were the named varieties, Crane, Leeds, and Wandell. The three selections all showed good promise as new varieties.

Washington (Tables 5 and 6).

Thirty-four advanced yield nursery samples were received from two stations in Washington -- Ellensburg and Royal Slope. For the Ellensburg series, three of the samples were the named varieties, Capeti, Leeds, and Wandell. The selections ND 65023 and WA 005953 showed no promise as new varieties due to poor color. Selection ND 66151 showed little promise as a new variety, having low color score. Selections M680 0116, M680 0127, M680 0143, and ND 66074 showed some promise as new varieties having minimum color scores. Selections K680 0707 and ND 64107 showed good promise as new varieties. For the 22 samples received from the Royal Slope nursery, two of the samples were the named varieties, Leeds and Wandell. Selections 71Y 5003 and 71Y 5012 showed no promise as new varieties, having poor color scores. Selections M680 0141 and MPOO 0002 showed little promise as new varieties, having low color scores. Selections K680 0707, M680 0114, M680 0131, M680 0138, M680 0145, M680 0198, and T720 5057 showed some promise as new varieties but having minimum color scores. All of the remaining selections showed good promise as new varieties.

FIELD PLOT NURSERY SAMPLES

California (Table 7).

Seven field plot nursery samples were received from the Davis, California station. There were no named varieties in this series and all of the samples showed no promise as new varieties, having very low color scores and low firmness scores.

North Dakota (Table 8).

Sixteen field plot nursery samples were received from the Williston, North Dakota station. Six of these samples were the named varieties, Hercules, Leeds, Rolette, Wascana, Wells, and Ward. One selection, DT 316 showed good promise as a new variety, while all of the other selections showed some promise as new varieties with the major deficiencies being minimum color and tenderness score. None of the samples were rated as showing little or no promise.

INTERNATIONAL YIELD NURSERY SAMPLES

Washington (Table 9).

Twenty International yield nursery samples were received from the Pullman, Washington station. Five of these samples showed some promise as new varieties; none showed good promise. The remainder of the samples showed little or no promise. The five samples showing some promise as new varieties were: Capeiti, Harkaiykaia, Leeds, Quilafen, and D6647.

PRELIMINARY YIELD NURSERY SAMPLES

California (Tables 10, 11, & 12).

A total of one hundred and twenty-four samples were received from the Tulelake, California station.

(Table 10).

Forty-three preliminary yield nursery samples were received designated as the Puri F-3 Crosses. Two of these samples were the named varieties, Leeds and Sentry. Of these samples, Nos. 64, 85, 87, and 90 showed some promise as new varieties, while selections 65, 66, 76, 81, 82, 83, 84, 86, 88, 93, 94, 95, and 96 showed good promise as new varieties. All of the remainder of the selections showed either little promise or no promise as new varieties, the primary fault being poor color.

(Table 11).

Sixty-six samples were received from the nursery designated as Puri F-4 Crosses. Of these samples, three were the Leeds variety and two were the Sentry variety. From the selections, the following showed some promise: No. 25, 29, 31, 32, 34, 48, 49, 51, 55, 57, 58, 60, and 62. While the following selections showed good promise: No. 5, 23, 24, 27, 28, 30, and 56. The remaining selections showed little or no promise as new varieties. The main fault with these samples was minimum color and extraction.

(Table 12).

Fifteen samples were received from the nursery designated as the Qualset F-5 Genotype. One sample was the named variety, Sentry. None of the samples showed good promise. Three of the samples showed some promise. These selections were No. 108, 113, and 120. The remainder of the selections showed little or no promise. The primary fault was poor color score.

Washington (Tables 13 & 14).

A total of 49 samples were received from the Pullman and Royal Slope, Washington preliminary yield nurseries. For the Pullman series, the durum nurseries were designated as A, B, C, and D.

(Table 13).

Thirty-seven samples were received from the preliminary yield nursery at Pullman designated as Nurseries A, B, C, and D. For Nursery A, T720 5049 showed some promise as a new variety, while Selections T720 5065, T720 5068, and T720 5071 showed good promise as new varieties. For Nursery B, M680 0127, ND 63152, T720 5085, and T720 5089 showed some promise as new varieties. For Nursery C, T720 5022 showed some promise as a new variety, and Selection T720 5021 showed good promise as a new variety. For Nursery D, T720 5030, T720 5032, and T720 5039 showed some promise as new varieties, and T720 5025, T720 5033, and T720 5042 showed good promise as new varieties. All of the remaining samples, except the named varieties, showed little or no promise as new varieties. The Nurseries B, C, and D definitely showed yellowberries.

(Table 14).

Twelve samples were received from the preliminary yield nursery at Royal Slope. Two of these samples were the named varieties, Wandell and Wascana. One sample, K680 0707, showed good promise as a new variety. Selections D6676, D6715, D6722, D6723, and M680 0139 showed some promise as new varieties. The other selections showed little or no promise as new varieties, showing low color scores.

SPECIAL YIELD NURSERY SAMPLES

California (Table 15).

Fifty-nine special nursery samples were received from the Davis, California station. One of these was the named variety, Leeds. The selections 53118, 53256, 53366, 53468, 53590, 53620, 53771, 53773, 54089, 54096, 54126, 54741, 54756, 54760, 54780, 54799, 54853, 55207, and 55221 showed some promise as new varieties. The selections 53104, 53176, 53210, 53217, 53264, 53390, 53404, 53702, 54734, and 54862 showed good promise as new varieties. The remaining samples showed little or no promise as new varieties, primarily because of poor color score and/or minimum extraction.

Minnesota (Table 16).

One special nursery sample was received from the Crookston, Minnesota station. This sample showed good promise.

Washington (Tables 17 & 18).

Eighty-four samples were received from two special nurseries at the Pullman and Royal Slope, Washington stations. The series from Pullman was designated as Experiment E.

(Table 17).

Thirty-two special nursery samples were received from the Pullman, Washington station, designated as Experiment E. Thirty of these samples showed good promise as new varieties, while the two samples Nos. 2 and 3, showed some promise as new varieties because of minimum color scores.

(Table 18).

Fifty-two special nursery samples were received from the Royal Slope, Washington station. Selections 1372-1, 1375-2, 1375-3, 1375-4, 1376-1, 1376-2, 1376-4, 1378-1, 1378-3, 1378-6, 1378-7, 1379-1, 1379-2, 1381-1, 1381-2, 1381-3, 1381-7, 1381-8, 1383-2, 1385-3, 1385-4, 1385-10, 1385-12, 1386-2, 1386-3, 1386-4, and 1386-6 show some promise as new varieties. Selections 1376-5, 1378-5, and 1381-4 show good promise as new varieties. All of the other samples show little or no promise; the primary faults being that of color with minimum kernel characteristics, such as size, test weight, and 1000 kernel weight.

UNIFORM REGIONAL NURSERY SAMPLES

Minnesota (Table 19).

Twenty-four samples were received from the Crookston, Minnesota station. Seven of these samples were the named varieties, Hercules, Leeds, Mindum, Rolette, Ward, Wascana, and Wells.

Montana (Table 20).

Twenty-four samples were received from the Sidney, Montana station. Seven of these samples were the named varieties, Hercules, Leeds, Mindum, Rolette, Ward, Wascana, and Wells.

North Dakota (Tables 21, 22, & 23).

Seventy-two samples were received from three stations in North Dakota -- Fargo, Langdon, and Williston. Some of these samples were processed in cooperation with the State Department of Cereal Chemistry and Technology. Seven of the samples were the named varieties, Hercules, Leeds, Mindum, Rolette, Ward, Wascana, and Wells.

South Dakota (Table 24).

Twenty-four samples were received from the Selby, South Dakota station. Seven of these samples were the named varieties, Hercules, Leeds, Mindum, Rolette, Ward, Wascana, and Wells.

Washington (Table 25).

Twenty-two samples were received from the Royal Slope, Washington station. Six of these samples were the named varieties, Hercules, Leeds, Mindum, Ward, Wascana, and Wells. Six of the selections were the same as those in the other Uniform Regional Nursery trials, while nine were different, some of which were included in last year's (1971) crop Uniform Regional Nursery trials.

Those samples grown only at the Royal Slope, Washington station were D6517 and D6821, which showed some promise as new varieties, giving minimum color scores. Selections D6647, D6718, D6723, D6838, D6876, and D6878 showed good promise as new varieties, while Plot #18 showed little promise as a new variety, giving low color score.

The overall general evaluation for the selections grown in the five states is discussed collectively.

D6676 - Shows good promise based on two crop year's results.

D6714 - Shows good promise based on three crop years, although it does have a tendency towards minimum color in various environments.

D6715 - Shows some promise based on three crop years, although it has tended to show minimum color and minimum kernel size distribution.

D6721 - Shows little promise, due primarily to erratic results in previous years and minimum color for this year's crop.

D6722 - Shows good promise.

D6733 - Shows little promise. Based on three crop years, this selection has given erratic results, such as minimum color and extraction.

D6761 - Shows some promise, based on two crop year's results but does have minimum color and sometimes poor milling characteristics.

D692 - Shows some promise, based on this crop year's results.

D6915 - Shows no promise. Poor color.

D6973 - Shows little promise. Minimum color and somewhat minimum milling characteristics.

D7057 - Shows some promise, but one case had minimum color and extraction.

D7067 - Shows good promise, based on this crop year's results.

D7075 - Shows some promise. Erratic results.

D70101 - Shows little promise, having minimum color as a general fault.

DT 316 - Shows little promise, having minimum color, minimum extraction and test weight based on this crop year's results.

DT 332 - Shows some promise, but does have minimum color and in one case, minimum test weight.

TABLE 1

QUALITY DATA ON 1972 CROP STANDARD DURUM WHEAT SAMPLES

1972 CROP

Variety or State Sel. No.	T.W. Kwt. <u>1/</u>	1000 Kwt. <u>1/</u>	Kernel Size Lg. Med. Sm.	Wht. Pro. <u>2/</u>	Semo. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Semo. Ash <u>2/</u>	Specks/ 10 Sq. In. <u>4/</u>	Dust Color Score <u>4/</u>	Semo. Abs. <u>2/</u>	Vis. Color <u>%</u>	Tender. Score
#/Bu.	g.	%	%	%	%	%	%	%	%	%	%	
<u>Micro Samples</u>												
1972 Durum Standard	62.0	36.4	35	64	1	13.3	-	49.9	-	-	93	-
<u>Macro Samples</u>												
1972 Durum Standard	62.0	36.4	35	64	1	13.3	12.1	58.7	.59	30	-	31.5
<u>1/</u>	Unofficial											
<u>2/</u>	14% Moisture Basis											
<u>3/</u>	Purified											
<u>4/</u>	Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.											

1/ Unofficial
2/ 14% Moisture Basis
3/ Purified
4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.

TABLE 2

QUALITY DATA ON ADVANCED YIELD DURUM WHEAT NURSERY SAMPLES

CALIFORNIA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Tulelake</u>									
Capeti	60.0	47.4	79	21	0	12.7	47.9	90	3
Leeds	61.5	46.1	75	24	1	13.5	51.4	88	3
Wandell	60.0	39.1	35	61	4	10.3	50.2	86	2
K680 0707	61.0	46.9	76	23	1	12.4	50.2	91	4
M680 0116	60.0	42.4	56	43	1	12.3	50.0	85	2
M680 0127	61.0	45.0	70	29	1	12.7	50.9	87	2
M680 0143	60.5	40.8	57	42	1	12.3	49.8	88	3
MD00 0136	61.5	43.5	66	33	1	10.3	48.8	79	1
ND 64107	61.5	41.0	68	30	2	11.8	51.2	83	2
ND 65023	60.5	47.8	68	30	2	10.6	49.8	84	2
ND 66074	61.0	49.8	80	19	1	13.5	51.4	90	3
ND 66151	61.0	47.1	73	26	1	10.9	50.0	87	2
71-179	57.5	49.5	82	18	0	11.4	48.8	82	1
71-189	60.5	52.1	85	15	0	11.9	46.9	87	1
71-349	61.5	37.9	47	51	2	10.9	49.3	79	1
71-357	60.5	46.5	82	18	0	13.0	49.8	89	3

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 3

QUALITY DATA ON ADVANCED YIELD DURUM WHEAT NURSERY SAMPLES

MONTANA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>
	#/Bu.	g.	%	%	%	%	%	
<u>Belgrade (Nonfertilized)</u>								
Leeds	62.2	38.5	44	52	4	12.1	52.7	92
Wells	61.5	34.4	29	67	4	11.2	52.5	89
<u>Belgrade (Fertilized)</u>								
Leeds	61.0	35.2	28	70	2	16.0	54.0	95
Wells	59.8	31.3	14	81	5	16.4	52.7	91
<u>Creston</u>								
Leeds	61.9	40.7	65	34	1	16.8	56.9	92
Wells	62.2	36.9	54	44	2	15.2	56.5	90
<u>Havre</u>								
Leeds	59.8	39.5	44	54	2	15.5	57.1	92
Wells	58.5	31.7	25	71	4	15.4	54.8	90
<u>Huntley</u>								
Leeds	60.1	41.3	48	48	4	14.8	54.0	92
Wells	60.0	36.6	36	58	6	14.5	55.0	89
<u>Moccasin</u>								
Leeds	62.0	34.5	7	92	1	16.7	56.2	95
Wells	61.4	31.3	4	94	2	16.8	55.8	94
<u>Sidney (Dryland)</u>								
Leeds	62.3	40.7	51	47	2	13.6	59.4	92
Wells	61.7	33.7	34	63	3	12.1	57.4	91
<u>Sidney (Irrigated)</u>								
Leeds	62.7	40.3	57	42	1	12.1	60.9	92
Wells	62.0	31.2	22	74	4	11.4	56.6	93

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.

TABLE 4

QUALITY DATA ON ADVANCED YIELD DURUM WHEAT NURSERY SAMPLES

OREGON

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Pendleton (Irrigated)</u>									
Capeti	63.5	47.8	79	21	0	13.3	52.1	89	3
Gerondo	63.5	51.5	71	28	1	12.9	52.5	86	2
Leeds	63.5	40.7	49	49	2	14.3	53.2	92	4
Wandell	63.0	36.5	20	73	7	10.5	53.7	88	3
K680 0707	63.5	40.0	48	50	2	13.2	55.8	95	4
M680 0116	62.0	39.1	28	69	3	13.9	53.7	89	3
M680 0127	64.5	43.5	61	38	1	12.4	53.0	94	4
M680 0143	63.0	40.3	44	54	2	12.1	53.7	88	2
MD00 0136	64.5	46.3	70	28	2	10.6	52.8	80	1
ND 64107	64.0	40.2	44	52	4	11.4	51.9	84	2
ND 65023	62.5	48.8	61	36	3	11.6	55.8	83	1
ND 66074	63.0	45.0	61	37	2	13.9	51.9	90	3
ND 66151	63.0	45.5	65	33	2	12.4	53.2	88	2

Pendleton (Dryland)

Crane	61.0	41.8	34	64	2	10.7	48.8	84	2
Leeds	61.5	39.4	30	66	4	11.8	54.2	96	4
Wandell	59.0	32.3	2	80	18	11.2	50.9	95	4
D627 8201	59.0	36.0	10	80	10	11.7	53.0	95	4
M680 0119	60.5	38.8	14	79	7	12.4	53.7	93	4
M680 0145	61.0	35.8	10	84	6	12.5	53.5	93	4

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 5

QUALITY DATA ON ADVANCED YIELD DURUM WHEAT NURSERY SAMPLES

WASHINGTON

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Ellensburg</u>									
Capeti	64.0	50.5	87	13	0	11.9	51.2	87	2
Leeds	64.0	43.9	69	31	0	13.5	52.6	91	4
Wandell	62.5	38.5	29	67	4	10.2	51.6	88	3
K680 0707	64.0	43.1	61	39	0	12.5	52.6	94	4
M680 0116	62.0	35.7	56	43	1	12.5	52.1	89	3
M680 0127	63.5	45.5	68	32	0	13.4	50.2	90	3
M680 0143	63.0	41.7	57	42	1	12.6	52.1	89	3
ND 64107	63.5	46.5	68	31	1	10.9	53.2	93	4
ND 65023	62.0	50.5	73	26	1	10.8	51.9	80	1
ND 66074	64.0	47.8	76	24	0	12.6	53.0	89	3
ND 66151	63.0	47.1	71	28	1	10.9	52.3	86	2
WA 005953	64.5	46.9	69	31	0	10.4	52.8	82	1

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 6

QUALITY DATA ON ADVANCED YIELD DURUM WHEAT NURSERY SAMPLES

WASHINGTON

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	Lg.	Med.	Sm.	Pro.	%	%	
<u>Royal Slope</u>									
Leeds	64.0	49.3	74	25	1	12.0	50.2	89	3
Wandell	64.0	52.1	79	20	1	12.1	52.4	87	3
K680 0707	62.0	49.0	76	23	1	12.0	50.2	87	3
M680 0114	63.0	44.2	62	37	1	12.3	50.7	89	3
M680 0131	62.0	43.5	51	48	1	11.1	50.7	86	3
M680 0138	62.0	40.3	50	49	1	12.5	51.6	89	3
M680 0141	62.5	46.3	67	32	1	12.4	51.2	88	2
M680 0145	63.0	42.7	54	45	1	12.3	49.3	90	3
M680 0198	62.0	44.4	66	33	1	13.8	49.1	89	3
MP00 0002	63.5	50.3	86	13	1	12.7	51.2	87	2
T720 5051	63.5	44.2	61	38	1	13.2	50.7	95	4
T720 5052	63.5	45.2	64	35	1	13.2	52.6	91	4
T720 5055	63.0	43.9	63	36	1	13.2	51.2	93	4
T720 5056	62.5	42.2	62	37	1	13.0	48.8	94	4
T720 5057	64.0	48.1	76	23	1	12.2	51.2	90	3
T720 5058	62.5	40.3	55	44	1	13.4	51.2	95	4
T720 5067	63.5	41.3	55	43	2	13.1	51.9	95	4
T720 5069	63.0	36.1	27	71	2	12.0	48.4	96	4
T720 5072	63.0	43.9	63	36	1	12.5	50.7	93	4
T720 5075	63.0	43.3	61	38	1	13.2	50.2	96	4
71Y 5003	63.0	48.1	77	22	1	11.4	48.4	78	1
71Y 5012	64.0	46.5	80	19	1	11.6	49.5	80	1

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 7

QUALITY DATA ON FIELD PLOT DURUM WHEAT NURSERY SAMPLES

CALIFORNIA

1972 CROP

Variety or State Sel. No.	T.W. Kwt. <u>1/</u>	1000 Kwt. <u>1/</u>	Kernel Lg. <u>2/</u>	Size Med. <u>2/</u>	Wht. Pro. <u>2/</u>	Semo. Pro. <u>2/</u>	Pur. Semo. <u>2/</u>	Specks/ 10 Sq. In. <u>2/</u>	Semo. Ash <u>2/</u>	Semo. Abs. <u>2/</u>	Vis. Color <u>2/</u>	Tender. Score <u>2/</u>	Gen. Eval. <u>4/</u>
#/Bu.	g.	%	%	%	%	%	%	%	%	%	%	%	%
<u>Davis</u>													
D7010	63.9	46.7	69	31	0	13.3	11.6	59.6	.52	20	32.0	8.0	3.08
D7075	62.3	50.8	78	22	0	13.7	11.8	57.7	.54	23	31.5	5.0	3.87
D7112	62.2	52.6	71	28	1	12.7	11.5	59.2	.55	20	31.5	5.5	4.17
D7114	64.1	44.6	70	29	1	12.1	10.8	58.6	.51	13	31.5	6.0	4.39
D7123	62.2	48.1	78	22	0	11.8	10.9	58.7	.59	17	31.5	6.5	4.24
K680718	63.6	45.0	64	35	1	12.4	11.2	57.2	.52	20	31.5	8.0	3.76
ND 6655	63.5	47.1	66	33	1	13.1	11.8	59.0	.52	17	31.5	8.0	3.57

Unofficial
11/ 14% Moisture Basis
12/ Purified
13/
14/ 1 = No Promise; 2 =

TABLE 8

QUALITY DATA ON FIELD PLOT DURUM WHEAT NURSERY SAMPLES

NORTH DAKOTA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Lg. <u>2/</u>	Size Med. <u>2/</u>	Wht. Pro. <u>2/</u>	Semo. Pro. <u>3/</u>	Pur. Semo. <u>2/</u>	Semo. Ash <u>2/</u>	Specks/ 10 Sq. In. <u>2/</u>	Semo. Abs. <u>2/</u>	Vis. Color <u>2/</u>	Tender. Score <u>2/</u>	Gen. Eval. <u>4/</u>	
<u>Williston</u>														
Hercules	62.2	43.5	48	51	1	14.2	12.7	54.9	.54	15	31.5	9.0	5.24	
Leeds	63.0	37.2	28	71	1	14.9	13.5	54.8	.64	12	31.5	9.5	5.16	
Rolette	63.2	33.4	13	83	4	12.9	12.4	53.1	.59	13	31.5	9.0	4.75	
Wascana	60.9	43.5	61	38	1	13.6	12.8	54.4	.58	13	31.5	9.5	5.16	
Wells	62.9	32.7	14	81	5	14.1	12.8	54.9	.52	12	31.5	9.5	5.04	
Ward	62.6	42.6	50	49	1	14.7	13.2	55.7	.55	9	31.5	9.0	4.61	
D6676	62.7	39.2	28	71	1	14.5	13.5	54.7	.57	13	31.5	9.5	4.55	
D6714	62.6	43.7	52	47	1	14.4	13.1	55.9	.57	13	31.5	9.0	4.78	
D6715	62.9	41.7	52	47	1	14.3	13.0	55.9	.54	12	31.5	9.0	4.24	
D6721	62.7	41.5	38	61	1	13.6	12.5	56.1	.51	12	31.5	9.0	4.77	
D6722	62.5	40.3	41	58	1	14.7	13.4	55.3	.59	13	31.5	9.0	4.47	
D6733	63.3	40.0	35	64	1	14.9	13.6	54.9	.58	14	31.5	9.0	4.77	
D6761	62.0	41.7	45	54	1	14.4	13.4	54.4	.58	13	31.5	9.0	4.14	
D6915	63.1	42.6	55	44	1	13.1	11.5	56.9	.47	13	31.5	9.0	3.97	
D6973	62.7	43.5	68	32	0	14.2	13.0	53.7	.54	17	31.5	9.0	4.79	
DT 316		61.2	39.5	35	63	2	14.7	13.5	53.2	.54	17	31.5	9.5	5.60

1/ Unofficial
2/ 14% Moisture Basis
3/ Purified
4/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 9

QUALITY DATA ON INTERNATIONAL YIELD DURUM WHEAT NURSERY SAMPLES

WASHINGTON

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Pullman</u>									
Anhinga *S*	65.5	61.0	92	8	0	12.0	49.8	80	1
Brant *S*	62.5	48.8	74	25	1	12.4	50.7	78	1
Capeiti	64.5	56.2	86	13	1	13.1	49.3	90	3
Cisne *S*	65.5	59.5	92	7	1	11.5	54.4	86	2
Cocorit	63.0	55.2	84	15	1	11.1	53.2	75	1
Crane *S* *B*	63.5	52.1	81	18	1	11.0	44.2	82	1
Gab-125	62.0	57.1	81	17	2	13.2	48.4	83	2
Ganso *S*	62.5	71.4	92	7	1	11.9	48.6	82	1
Harkaiykaia	62.5	39.7	41	56	3	13.3	50.5	89	3
Hercules	64.5	59.9	88	11	1	13.6	53.9	88	2
Hilba	59.5	54.6	77	20	3	12.8	50.5	86	2
Jori C-69	64.5	63.7	94	5	1	13.5	50.0	83	2
Leeds	65.0	49.5	80	19	1	13.8	51.4	90	3
Parana 66/270	63.5	56.2	89	10	1	12.6	50.5	85	2
Quilafen	64.5	57.8	86	13	1	11.3	50.0	90	3
Wandell	64.5	43.3	62	34	4	10.1	53.2	86	2
D6647	62.0	39.1	33	62	5	12.6	49.5	90	3
Jo *S* -CR *S*	63.0	60.6	89	10	1	13.0	53.0	84	2
61-130 X Leeds	65.5	53.2	83	16	1	11.6	52.3	85	2
T. Dic Vernum- GLL *S*	65.5	51.5	80	18	2	10.7	52.6	78	1

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 10

QUALITY DATA ON PRELIMINARY YIELD DURUM WHEAT NURSERY SAMPLES

PURI F-3 CROSSES

CALIFORNIA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Tulelake</u>									
63	64.0	51.3	86	14	0	12.4	52.4	86	2
64	63.0	51.5	84	16	0	12.3	53.6	90	3
65	61.0	46.5	75	25	0	12.7	49.8	91	4
66	62.0	45.7	74	26	0	11.2	52.6	92	4
67	62.0	51.5	86	14	0	11.8	51.9	79	1
68	63.0	46.5	68	32	0	11.1	50.9	83	1
69	61.5	52.4	91	9	0	14.0	45.5	85	2
Sentry	62.5	54.3	90	10	0	13.3	50.0	88	2
71	63.5	52.9	87	13	0	12.3	50.7	88	2
72	62.0	45.8	70	30	0	12.1	49.5	87	2
73	62.0	47.8	79	21	0	11.4	50.5	86	2
74	60.0	50.8	84	16	0	12.4	46.0	86	2
75	61.5	54.9	89	11	0	12.8	51.4	87	2
76	62.0	49.0	83	17	0	12.2	49.1	93	4
77	62.0	50.5	86	14	0	12.6	51.4	88	2
78	61.0	57.1	88	12	0	12.8	52.6	87	2
79	61.5	55.6	89	11	0	12.4	53.1	86	2
80	62.5	53.8	85	15	0	12.9	50.9	87	2
81	61.0	47.6	78	22	0	12.0	49.5	93	4
82	63.5	52.9	86	14	0	11.2	50.2	91	4
83	62.5	53.8	88	12	0	11.8	48.6	94	4
84	62.5	53.8	87	13	0	12.5	47.2	94	4
85	62.5	49.3	82	18	0	11.3	46.0	90	3
86	61.0	48.3	59	41	0	12.0	47.6	91	4
87	62.5	48.5	79	21	0	12.2	46.7	89	3
88	61.0	49.0	76	24	0	11.7	50.9	91	4
89	62.5	50.8	84	16	0	12.5	51.6	87	2
90	63.0	54.3	81	19	0	12.6	50.7	89	3
91	63.0	52.4	86	14	0	14.3	51.4	86	2
92	62.5	50.5	85	15	0	13.2	50.2	87	2

(CONT'D.)

TABLE 10 (CONT'D.)

QUALITY DATA ON PRELIMINARY YIELD DURUM WHEAT NURSERY SAMPLES

PURI F-3 CROSSES

CALIFORNIA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Tulelake (Cont'd.)</u>									
93	60.5	50.8	82	18	0	12.7	49.5	93	4
94	62.0	51.8	80	20	0	12.7	51.4	91	4
95	62.0	50.5	82	18	0	12.6	45.8	94	4
96	63.0	58.8	90	10	0	11.4	47.2	91	4
97	61.5	49.5	77	23	0	12.3	48.6	85	2
98	62.0	46.1	72	28	0	12.2	48.8	85	2
99	62.5	48.1	70	30	0	11.4	51.2	87	2
Leeds	62.5	52.9	87	13	0	13.8	50.7	91	4
101	63.0	49.0	84	16	0	12.9	50.7	85	2
102	63.5	46.3	79	21	0	11.6	49.1	85	2
103	62.0	47.6	78	22	0	12.2	47.4	84	2
104	60.5	46.9	72	28	0	12.0	50.5	86	2
105	63.0	50.8	83	17	0	12.2	52.4	75	1

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 11

QUALITY DATA ON PRELIMINARY YIELD DURUM WHEAT NURSERY SAMPLES

PURI F-4 CROSSES

CALIFORNIA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Tulelake</u>									
1	60.5	50.5	78	21	1	12.3	47.0	80	1
2	62.0	50.5	84	16	0	14.5	44.1	86	2
3	63.0	56.5	90	10	0	13.8	44.6	82	1
4	62.0	54.6	84	15	1	13.9	44.8	85	2
5	60.5	56.2	87	12	1	15.6	45.3	93	4
6	62.0	53.8	89	11	0	13.4	48.4	86	2
7	61.5	54.1	86	14	0	13.5	46.2	78	1
8	63.0	58.1	94	6	0	12.6	45.8	84	1
9	62.5	54.3	90	10	0	14.0	45.1	87	2
10	63.5	54.9	90	10	0	13.2	46.5	86	2
11	62.0	55.9	90	10	0	13.2	46.5	86	2
12	60.0	61.3	92	8	0	13.1	43.1	85	1
13	61.0	54.3	91	9	0	13.7	43.9	85	1
14	61.5	56.2	92	8	0	13.6	44.5	88	2
15	61.0	59.2	93	7	0	13.8	44.8	87	2
16	60.0	57.8	93	7	0	13.4	49.1	86	2
17	60.0	54.3	90	10	0	13.2	43.9	86	2
18	59.5	55.2	92	8	0	12.9	43.4	85	1
Leeds	63.5	49.0	86	14	0	14.0	47.9	89	3
21	62.0	50.3	83	17	0	13.8	46.3	85	2
22	62.5	52.4	89	11	0	12.4	43.4	86	2
23	61.5	62.1	92	8	0	12.6	45.3	94	4
24	62.0	54.6	90	10	0	12.8	47.2	94	4
25	61.5	57.3	92	8	0	13.4	46.0	89	3
26	60.5	55.6	90	10	0	13.2	46.2	85	2
27	59.5	54.1	92	8	0	14.4	44.8	94	4
28	61.0	53.5	90	10	0	13.4	44.8	96	4
29	61.5	54.9	88	12	0	13.8	47.9	89	3
Sentry	61.5	56.2	89	11	0	14.6	32.9	87	1
30	64.0	58.1	93	7	0	14.8	48.4	95	4

(CONT'D.)

TABLE 11 (CONT'D.)

QUALITY DATA ON PRELIMINARY YIELD DURUM WHEAT NURSERY SAMPLES

PURI F-4 CROSSES

CALIFORNIA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Tulelake (Cont'd.)</u>									
31	63.0	52.4	90	10	0	13.4	48.4	89	3
32	61.0	48.3	84	16	0	12.5	46.5	86	3
33	60.0	46.7	80	20	0	11.1	45.8	88	2
Leeds	62.5	51.5	91	9	0	14.3	47.9	91	3
34	62.5	55.9	92	8	0	11.7	50.0	89	3
35	60.0	51.8	90	10	0	13.5	45.5	86	2
36	61.0	50.8	82	17	1	14.0	45.8	87	2
37	61.0	56.2	89	11	0	14.0	47.6	83	1
38	62.0	56.8	90	10	0	12.5	48.4	86	2
39	59.0	52.9	91	9	0	13.3	44.1	85	2
40	60.5	57.1	90	10	0	13.6	46.7	85	2
Sentry	62.0	50.5	88	12	0	14.6	48.6	89	3
41	61.5	54.3	89	11	0	13.0	49.1	85	2
42	59.5	50.3	88	12	0	15.1	44.3	87	2
43	61.0	54.3	84	16	0	12.4	45.3	86	2
44	61.0	55.2	90	10	0	13.8	46.9	84	1
45	62.0	48.3	78	22	0	12.8	47.0	83	1
46	62.0	48.1	82	18	0	13.3	44.8	88	2
47	61.0	50.3	82	18	0	13.7	42.9	85	2
48	61.0	49.5	85	15	0	12.8	43.9	90	3
49	62.0	55.2	92	8	0	14.8	47.7	90	3
50	60.5	50.8	88	12	0	14.4	45.3	88	2
51	60.0	55.2	92	8	0	14.8	45.5	91	3
Sentry	62.5	52.9	90	10	0	14.0	47.0	87	2
52	62.0	47.8	84	16	0	12.4	47.4	75	1
53	60.5	40.3	49	51	0	11.7	42.0	70	1
54	61.0	45.2	67	33	0	11.4	40.1	75	1
55	61.0	49.5	86	14	0	13.5	45.5	91	3
56	61.0	47.4	86	14	0	14.8	45.1	92	4
57	61.0	51.8	87	13	0	12.9	47.9	89	3

(CONT'D.)

TABLE 11 (CONT'D.)

QUALITY DATA ON PRELIMINARY YIELD DURUM WHEAT NURSERY SAMPLES

PURI F-4 CROSSES

CALIFORNIA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Lg.	Size Med.	Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%		
58	60.5	46.5	83	17	0	13.3	48.0	91
59	59.0	54.3	90	10	0	12.5	46.5	83
60	61.0	51.3	86	14	0	14.3	45.5	90
61	62.0	50.0	84	16	0	14.2	50.5	86
Leeds	63.5	50.3	88	12	0	14.5	50.9	88
62	63.0	54.6	90	10	0	13.9	48.4	89

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 12

QUALITY DATA ON PRELIMINARY YIELD DURUM WHEAT NURSERY SAMPLES

QUALSET F-5 GENOTYPE

CALIFORNIA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Tulelake</u>									
106	62.0	48.1	80	20	0	12.3	46.0	87	2
107	62.0	50.8	83	17	0	12.0	43.4	86	2
108	62.5	46.3	74	26	0	12.4	45.3	90	3
109	61.5	50.8	85	15	0	13.1	43.4	85	2
110	61.0	45.8	74	26	0	11.3	42.5	83	1
111	62.0	49.0	82	18	0	11.9	40.4	86	1
112	62.0	48.3	75	25	0	11.3	41.3	83	1
113	61.5	53.5	86	14	0	12.5	44.5	92	3
114	62.0	50.3	78	22	0	11.5	45.0	86	2
115	63.0	52.6	89	11	0	11.8	46.9	86	2
Sentry	63.0	52.9	90	10	0	14.4	50.9	88	3
117	62.0	50.8	83	17	0	12.6	44.3	87	2
118	61.5	48.8	84	16	0	14.5	44.3	84	2
119	61.0	54.9	90	10	0	12.9	44.3	86	2
120	61.0	47.6	70	30	0	11.9	43.9	91	3

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 13

QUALITY DATA ON PRELIMINARY YIELD DURUM WHEAT NURSERY SAMPLES

WASHINGTON

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Pullman - Nursery "A"</u>									
Castelporziano	64.0	61.3	92	8	0	15.4	53.0	86	2
CP-B144	64.0	68.0	95	5	0	15.4	53.2	84	2
T720 5049	64.0	50.0	77	21	2	15.2	52.1	89	3
T720 5065	65.0	48.5	79	21	0	16.2	53.2	94	4
T720 5068	64.0	42.4	66	33	1	17.1	52.1	91	4
T720 5071	64.5	41.2	53	45	2	15.7	51.6	95	4
<u>Pullman - Nursery "B"</u>									
Candealfen 5	63.0	63.7	94	6	0	18.3	53.2	85	2
Leeds	64.5	47.6	82	18	0	17.2	52.1	89	3
Wandell	63.0	40.2	46	49	5	14.5	53.7	88	2
M680 0127	65.0	47.8	73	26	1	15.6	53.0	89	3
ND 06659	64.5	50.3	80	19	1	15.3	53.5	87	2
ND 06660	65.0	52.4	84	16	0	15.0	54.6	86	2
ND 63152	63.0	48.5	77	22	1	15.6	53.7	89	3
T720 5081	64.0	47.1	70	29	1	17.6	51.9	86	2
T720 5085	64.0	39.5	52	45	3	15.4	53.0	89	3
T720 5086	64.0	38.6	47	47	6	14.9	53.5	87	2
T720 5088	62.0	41.5	38	56	6	14.7	54.2	88	2
T720 5089	63.0	40.7	44	52	4	14.5	53.7	89	3
T720 5092	62.5	39.7	40	54	6	14.3	53.0	87	2
<u>Pullman - Nursery "C"</u>									
T720 5003	64.0	48.5	80	20	0	10.9	49.1	86	2
T720 5007	62.5	48.8	86	14	0	10.9	47.2	86	2
T720 5008	64.0	48.3	86	14	0	10.9	47.9	85	2
T720 5009	62.5	48.8	86	14	0	10.4	49.3	86	2
T720 5012	61.5	42.4	66	33	1	10.2	47.4	82	1
T720 5021	61.5	45.7	88	12	0	11.2	49.8	93	4
T720 5022	61.5	49.3	93	7	0	11.2	49.8	90	3
T720 5023	61.5	44.4	90	10	0	10.5	51.4	87	2

(CONT'D.)

TABLE 13 (CONT'D.)

QUALITY DATA ON PRELIMINARY YIELD DURUM WHEAT NURSERY SAMPLES

WASHINGTON

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Pullman - Nursery "D"</u>									
T720 5024	63.5	50.5	89	11	0	10.6	46.0	84	2
T720 5025	64.0	41.3	68	31	1	10.5	48.1	96	4
T720 5030	61.5	51.3	86	14	0	10.1	48.1	89	3
T720 5031	61.5	50.0	86	14	0	10.3	47.0	87	2
T720 5032	62.0	45.2	76	24	0	10.0	47.9	91	3
T720 5033	62.5	49.5	83	17	0	10.1	49.3	94	4
T720 5039	61.0	39.2	63	36	1	10.7	47.7	92	3
T720 5042	60.0	46.9	71	28	1	11.3	49.3	94	4
T720 5045	63.5	38.8	52	46	2	10.4	49.1	85	2
T720 5046	63.0	55.6	92	8	0	11.9	50.5	85	2

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 14

QUALITY DATA ON PRELIMINARY YIELD DURUM WHEAT NURSERY SAMPLES

WASHINGTON

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Royal Slope</u>									
Wandell	62.0	39.1	40	53	7	11.0	53.5	89	3
Wascana	61.5	50.0	78	21	1	11.7	53.0	94	4
D6676	64.5	46.5	73	26	1	13.0	55.0	89	3
D6715	63.0	47.6	70	28	2	12.4	54.0	91	3
D6718	64.5	52.1	81	19	0	12.8	52.3	87	2
D6722	64.0	48.8	76	23	1	12.5	53.0	89	3
D6723	64.0	50.0	80	20	0	12.3	53.7	89	3
K680 0707	64.0	46.5	65	33	2	11.8	54.6	95	4
K680 0121	63.0	41.3	58	40	2	12.4	54.6	88	2
M680 0139	62.5	42.9	57	41	2	12.2	54.2	89	3
71Y 5003	62.5	44.2	70	28	2	11.1	49.1	80	1
71Y 5012	62.0	44.4	71	28	1	12.4	50.5	84	2

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 15

QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

CALIFORNIA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Davis</u>									
Leeds	60.5	43.7	69	30	1	15.3	45.7	90	3
53097	61.0	43.7	62	37	1	13.1	46.2	88	2
53104	61.0	48.5	77	22	1	14.1	44.9	92	4
53118	61.0	45.2	71	28	1	13.8	44.1	89	3
53120	61.5	45.0	69	30	1	13.5	47.1	85	2
53176	59.0	42.9	68	31	1	14.0	44.6	92	4
53179	60.0	39.4	53	46	1	13.4	44.1	88	2
53210	61.0	42.7	65	34	1	14.4	44.4	94	4
53217	60.0	45.5	71	28	1	13.6	45.7	92	4
53228	59.0	46.9	70	29	1	12.8	47.8	85	2
53256	58.0	48.3	76	23	1	13.2	45.7	90	3
53264	59.5	41.5	45	54	1	13.4	44.9	92	4
53267	59.5	39.5	50	49	1	14.1	44.4	87	2
53304	60.0	46.1	76	23	1	13.5	44.1	87-R	1
53356	62.5	49.8	79	20	1	13.2	47.3	85	2
53366	58.5	46.1	63	36	1	12.3	46.2	90	3
53373	57.5	44.2	63	36	1	13.0	44.9	87	2
53390	59.0	47.1	77	22	1	15.1	43.5	94	4
53399	63.0	48.1	67	32	1	12.0	49.2	85	2
53404	58.5	50.8	87	12	1	14.1	43.9	95	4
53468	59.5	42.6	65	34	1	12.6	45.5	90	3
53517	59.5	42.6	65	34	1	12.8	43.0	87	2
53590	61.0	43.5	61	38	1	12.3	47.3	88	3
53618	60.0	44.1	69	30	1	12.9	48.9	87	2
53620	60.0	44.8	67	32	1	12.2	49.7	86	3
53638	59.5	47.8	76	23	1	13.1	48.7	86	2
53702	61.0	46.5	78	21	1	13.7	48.1	93	4
53757	62.0	48.3	79	20	1	12.6	47.1	87	2
53771	60.0	47.8	75	24	1	11.9	45.5	89	3
53773	60.0	50.0	75	24	1	11.7	46.5	89	3

(CONT'D.)

TABLE 15 (CONT'D.)

QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

CALIFORNIA

1972 CROP

Variety or State Sel. No.	T.W.	1000 Kwt.	Kernel Size			Wht. Pro.	Pur. Semo.	Dust Color Score	Gen. Eval.
	<u>1/</u>		Lg.	Med.	Sm.	<u>2/</u>	<u>3/</u>	<u>4/</u>	<u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Davis (Cont'd.)</u>									
54089	61.0	43.5	69	30	1	11.3	46.8	90	3
54096	61.0	44.2	58	41	1	12.4	45.7	89	3
54126	58.5	37.9	24	75	1	11.9	41.1	91	3
54734	62.0	50.8	82	17	1	14.2	47.8	93	4
54741	62.5	48.8	69	30	1	12.8	50.8	89	3
54756	62.0	50.8	75	24	1	12.8	49.5	89	3
54760	62.5	49.0	73	25	2	13.4	49.7	89	3
54765	63.0	51.5	77	22	1	12.8	51.3	87	2
54772	63.0	51.3	75	24	1	13.1	51.1	87	2
54780	62.5	50.5	72	27	1	13.0	51.1	88	3
54799	61.0	46.1	70	29	1	12.6	50.0	89	3
54818	61.0	49.8	73	26	1	14.1	48.7	87	2
54826	61.0	50.8	79	20	1	13.6	49.7	88	2
54850	63.0	54.1	79	20	1	11.7	50.3	85	2
54853	62.0	49.8	72	27	1	13.0	49.2	89	3
54862	62.0	46.1	71	28	1	12.5	50.0	92	4
54877	62.5	48.5	67	32	1	12.1	50.5	87	2
54889	62.5	46.3	69	30	1	12.3	49.5	85	2
54978	61.5	49.5	82	17	1	12.5	48.1	88	2
55080	60.5	51.0	78	21	1	11.5	51.3	87	2
55157	61.0	49.5	73	26	1	13.4	50.8	88	2
55167	60.0	46.3	58	41	1	12.4	50.8	87	2
55207	61.5	51.0	71	28	1	12.8	51.6	88	3
55221	61.0	50.5	76	23	1	13.7	51.1	88	3
55238	60.5	48.8	68	31	1	12.0	48.7	86	2
55244	60.5	49.5	75	24	1	14.0	48.1	88	2
55256	61.5	49.3	73	26	1	11.8	49.7	86	2
55265	60.5	49.8	63	36	1	14.3	50.0	87	2
55280	60.0	45.5	63	36	1	12.0	48.9	88	2

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86. R - Red.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 16
QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLE

MINNESOTA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		

Crookston

124-1	61.0	37.3	31	65	4	10.9	53.0	91	4
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1/ Unofficial

2/ 14% Moisture Basis

3/ Purified

4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.

5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 17

QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

EXPERIMENT E

WASHINGTON

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Pullman</u>									
2	63.5	52.1	75	24	1	15.8	50.2	90	3
3	65.0	52.6	83	17	0	13.7	50.9	89	3
15	63.5	52.1	70	28	2	14.1	53.5	91	4
40	64.0	49.8	71	27	2	13.5	48.6	95	4
48	62.5	40.2	46	51	3	12.9	47.9	102	4
50	63.0	49.8	76	24	0	13.9	50.9	92	4
53	61.5	44.1	50	48	2	15.4	47.7	95	4
56	64.0	46.9	74	25	1	13.7	50.7	94	4
69	63.5	42.6	61	37	2	12.9	52.1	94	4
71	62.5	44.1	56	41	3	12.9	51.2	95	4
96	64.5	51.0	77	22	1	14.1	51.6	94	4
102	61.5	49.5	59	37	3	14.6	51.4	98	4
103	62.5	45.2	56	42	2	12.8	50.5	94	4
108	63.5	46.9	72	28	0	15.0	50.5	93	4
115	63.0	36.9	30	65	5	12.4	48.6	96	4
117	64.0	52.6	76	33	1	14.3	52.1	91	4
133	63.5	49.0	76	23	1	14.2	49.8	94	4
176	63.0	42.0	50	47	3	12.6	49.1	95	4
194	62.5	44.4	63	35	2	13.2	50.5	93	4
242	61.5	40.5	40	57	3	13.0	48.4	93	4
252	64.0	48.5	78	22	0	14.1	49.8	94	4
269	63.5	43.1	62	36	2	11.9	52.5	95	4
289	63.5	48.8	62	36	2	13.0	52.8	96	4
290	61.0	41.7	39	58	3	13.3	48.1	91	4
296	64.0	49.5	71	27	2	13.2	52.8	92	4
308	61.5	47.1	64	34	2	14.1	50.7	95	4
309	64.5	49.0	75	24	1	12.7	53.0	94	4
311	63.5	50.8	78	22	0	13.7	50.0	95	4
312	62.5	47.4	61	37	2	13.9	51.4	95	4
313	64.0	44.6	62	37	1	11.6	53.0	96	4

(CONT'D.)

TABLE 17 (CONT'D.)

QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

EXPERIMENT E

WASHINGTON

1972 CROP

Variety or State Sel. No.	T.W.	1000	Kernel Size			Wht.	Pur.	Dust Color	Gen. Eval.
		Kwt.	Lg.	Med.	Sm.	Pro.	Semo.	Score	
	<u>1/</u>	#/Bu.	g.	%	%	%	%	%	<u>5/</u>
Pullman (Cont'd.)									
326		64.0	52.6	78	22	0	12.6	52.1	92
327		64.5	49.5	78	22	0	12.5	52.1	92

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 18
QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

WASHINGTON

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Royal Slope</u>									
1372-1	62.5	38.8	44	52	4	17.0	50.7	90	3
1372-2	63.5	42.2	53	43	4	16.8	53.0	88	2
1375-1	64.5	46.9	64	35	1	17.3	54.0	87	2
1375-2	61.5	38.3	32	66	2	17.5	53.2	89	3
1375-3	62.5	39.5	31	66	3	16.7	52.3	89	3
1375-4	63.0	39.7	26	70	4	13.0	52.8	89	3
1376-1	62.0	37.5	21	74	5	13.5	51.2	90	3
1376-2	60.0	33.3	13	80	7	14.5	51.2	91	3
1376-3	60.0	32.6	12	78	10	14.8	50.5	91	2
1376-4	60.5	31.9	17	75	8	14.9	49.8	92	3
1376-5	58.0	32.6	14	77	9	15.3	47.5	94	4
1378-1	58.5	34.5	17	71	12	14.9	48.4	90	3
1378-2	57.5	28.4	3	74	23	15.0	48.1	95	2
1378-3	55.0	32.1	12	72	16	15.0	46.5	94	3
1378-4	57.5	28.9	7	76	17	14.0	49.7	95	2
1378-5	58.0	31.7	17	71	12	14.5	49.1	93	4
1378-6	60.0	33.7	17	75	8	15.3	50.9	90	3
1378-7	58.5	28.4	9	76	15	15.3	47.5	93	3
1379-1	60.5	36.5	26	66	8	14.3	48.6	89	3
1379-2	61.5	41.3	29	66	5	12.3	51.4	90	3
1381-1	58.5	29.3	21	66	13	14.0	50.9	92	3
1381-2	58.0	30.4	12	73	15	14.0	50.7	93	3
1381-3	58.0	32.4	23	67	10	13.9	50.5	91	3
1381-4	59.5	31.2	17	74	9	13.7	54.3	93	4
1381-5	60.0	33.8	26	65	9	12.6	52.1	85	2
1381-6	59.5	33.8	25	66	9	13.6	51.9	86	2
1381-7	58.5	32.1	15	72	13	13.9	51.6	92	3
1381-8	57.5	28.2	13	68	19	14.0	50.2	91	3
1383-1	56.5	29.9	10	75	15	14.8	50.0	89	2
1383-2	56.5	34.5	25	79	6	15.3	51.1	92	3

(CONT'D.)

TABLE 18 (CONT'D.)

QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

WASHINGTON

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Royal Slope (Cont'd.)</u>									
1383-3	56.5	29.8	12	74	14	14.7	46.1	89	2
1383-4	58.5	31.4	14	72	14	13.9	51.9	89	2
1383-5	54.5	27.5	6	73	21	14.3	48.4	91	2
1383-6	56.0	27.2	10	75	15	14.8	50.0	90	2
1385-1	56.5	36.2	30	63	7	15.2	50.3	89	2
1385-2	56.5	25.4	4	71	25	13.7	50.2	93	2
1385-3	57.5	33.2	17	72	11	13.0	52.2	93	3
1385-4	59.0	30.5	15	72	13	14.0	50.5	94	3
1385-5	56.5	28.2	9	74	17	15.1	47.2	90	2
1385-6	57.5	31.0	17	68	15	14.8	47.9	91	2
1385-7	55.0	26.0	7	71	22	15.5	47.6	95	2
1385-8	54.5	24.0	5	67	28	16.0	48.1	89	1
1385-9	52.5	23.4	5	68	27	15.5	45.2	95	2
1385-10	57.0	28.2	7	77	16	14.7	51.6	94	3
1385-11	55.0	27.5	8	77	15	15.6	49.2	95	2
1385-12	56.5	28.7	12	71	17	15.3	48.1	94	3
1386-1	54.5	25.1	5	68	27	14.9	47.6	92	2
1386-2	57.5	32.1	15	72	13	13.4	51.9	93	3
1386-3	61.0	34.6	29	65	6	13.6	53.5	90	3
1386-4	59.0	30.0	19	67	14	12.1	49.5	90	3
1386-5	54.5	25.8	5	70	25	15.0	46.8	96	2
1386-6	56.5	31.7	16	70	14	14.2	51.3	94	3

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 19

QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

MINNESOTA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Crookston</u>									
Hercules	62.5	45.8	63	36	1	11.5	51.9	91	3
Leeds	62.0	40.0	44	55	1	12.3	49.1	94	4
Mindum	64.0	42.4	51	47	2	10.1	52.8	89	2
Rolette	63.0	42.0	51	48	1	12.4	51.9	90	3
Ward	63.0	40.7	55	44	1	10.9	50.2	94	4
Wascaña	61.5	43.1	63	36	1	11.2	49.3	94	4
Wells	63.0	34.6	35	62	3	11.9	50.8	90	3
D6676	62.5	42.2	49	49	2	11.8	50.2	92	4
D6714	62.5	41.3	45	52	3	11.3	51.2	92	4
D6715	62.5	39.7	44	54	2	11.7	50.5	91	3
D6721	62.0	43.5	48	50	2	12.2	50.9	92	4
D6722	62.5	44.6	52	46	2	11.3	50.5	91	3
D6733	62.0	39.8	43	56	1	12.2	50.5	92	4
D6761	61.5	44.1	54	45	1	12.4	50.0	90	3
D692	62.0	37.9	29	68	3	12.7	51.9	92	4
D6915	62.0	37.7	41	58	1	12.1	50.2	90	3
D6962	61.5	35.7	20	77	3	12.9	49.8	94	4
D6973	62.5	40.2	53	45	2	11.7	50.2	91	3
D7057	62.5	36.9	31	67	2	11.3	52.3	91	3
D7067	62.0	40.8	57	42	1	13.0	50.0	92	4
D7075	61.5	37.6	52	46	2	12.0	52.6	91	3
D70101	63.0	44.4	58	41	1	11.3	52.8	91	3
DT 316	61.5	38.5	38	60	2	12.4	50.0	92	4
DT 332	62.0	43.1	64	35	1	12.7	51.9	93	4

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 20

QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

MONTANA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Sidney</u>									
Hercules	61.5	48.1	63	35	2	12.2	50.9	90	2
Leeds	63.0	43.1	48	51	1	13.0	51.2	95	4
Mindum	64.0	47.6	58	41	1	11.7	50.2	86	2
Rolette	63.0	48.3	60	38	2	13.1	51.9	90	2
Ward	62.0	44.8	58	40	2	12.0	51.4	94	4
Wascana	61.5	46.3	62	37	1	12.6	48.8	96	4
Wells	62.0	38.0	38	61	1	11.7	50.9	90	2
D6676	62.0	44.2	58	41	1	12.6	52.1	94	4
D6714	62.0	44.4	56	43	1	12.0	51.6	91	3
D6715	62.0	44.4	53	46	1	12.2	53.5	94	4
D6721	62.0	47.8	67	31	2	12.4	51.8	91	3
D6722	61.0	44.4	58	41	1	12.5	52.6	94	4
D6733	62.5	42.0	58	41	1	13.1	51.8	93	3
D6761	62.5	45.2	59	40	1	12.4	51.6	91	3
D692	62.0	42.9	49	50	1	12.7	51.6	92	3
D6915	62.0	43.9	62	37	1	12.0	50.7	89	2
D6962	63.0	44.1	56	43	1	12.1	52.1	95	4
D6973	63.0	45.2	69	31	0	13.1	50.9	93	3
D7057	62.5	41.8	40	59	1	11.1	53.7	92	3
D7067	61.5	45.5	66	33	1	12.4	51.2	91	3
D7075	61.0	38.5	48	51	1	12.8	53.0	93	3
D70101	62.0	46.1	60	39	1	12.0	52.8	90	2
DT 316	61.5	43.3	49	51	0	12.0	51.4	91	3
DT 332	61.5	46.9	67	32	1	12.4	50.2	92	3

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 21
QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

NORTH DAKOTA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	Lg.	Med.	Sm.	%	%	%	
<u>Fargo</u>									
Hercules	58.9	45.0	37	62	1	11.8	47.7	88	3
Leeds	58.3	36.7	10	85	5	12.2	46.3	94	4
Mindum	58.6	37.5	17	78	5	11.6	48.2	85	2
Rolette	59.1	42.5	22	76	2	12.1	50.3	90	3
Ward	58.0	42.4	22	75	3	11.7	48.0	91	4
Wascana	57.1	43.0	27	72	1	12.7	44.3	93	3
Wells	59.8	33.7	9	84	7	11.9	46.9	90	3
D6676	58.8	39.0	17	78	5	12.0	47.9	92	4
D6714	59.0	40.3	18	79	3	11.7	47.2	91	4
D6715	57.9	40.0	12	83	5	11.7	45.8	91	4
D6721	59.3	43.9	23	74	3	12.0	47.8	90	3
D6722	59.5	41.6	20	75	5	11.7	48.1	93	4
D6733	58.6	40.2	17	82	1	12.1	43.8	90	3
D6761	58.9	43.3	32	65	3	11.6	45.6	91	3
D692	58.5	38.5	13	82	5	11.8	47.5	93	4
D6915	61.1	41.6	28	70	2	10.7	50.2	83	1
D6962	58.4	38.5	9	84	7	12.0	47.1	92	3
D6973	57.6	40.6	28	69	3	11.9	46.8	91	3
D7057	54.6	35.9	7	87	6	11.7	46.9	92	3
D7067	60.9	42.3	30	68	2	11.7	49.3	91	4
D7075	57.5	36.8	12	82	6	12.3	47.3	91	3
D70101	59.0	45.9	31	66	3	12.6	50.6	90	3
DT 316	57.6	39.2	13	82	5	12.4	43.2	90	3
DT 332	58.5	43.8	37	60	3	11.8	46.0	92	4

1/ Unofficial

2/ 14% Moisture Basis

3/ Purified

4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.

5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 22

QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

NORTH DAKOTA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Langdon</u>									
Hercules	63.5	51.0	67	33	0	11.5	50.4	92	3
Leeds	64.5	43.3	37	63	0	11.9	50.7	94	4
Mindum	65.0	46.8	60	40	0	11.5	50.3	89	2
Rolette	64.5	51.1	62	38	0	13.0	50.3	90	3
Ward	63.5	46.0	50	50	0	12.2	50.1	95	4
Wascana	62.5	47.2	70	30	0	11.6	49.9	96	4
Wells	64.5	36.1	25	70	5	11.5	49.8	92	3
D6676	63.5	44.4	52	48	0	12.8	50.5	95	4
D6714	62.5	46.2	43	54	3	12.1	52.5	94	4
D6715	63.0	45.5	47	52	1	12.3	51.7	93	4
D6721	63.0	44.7	42	58	0	12.4	51.5	91	3
D6722	63.5	45.4	48	50	2	12.5	51.3	94	4
D6733	64.0	42.7	43	55	2	12.2	50.7	92	4
D6761	63.5	46.5	62	37	1	11.7	50.1	92	4
D692	63.5	45.3	42	57	1	12.1	51.0	95	4
D6915	64.0	46.3	55	45	0	11.1	51.5	91	3
D6962	64.0	47.0	60	38	2	12.3	50.3	94	4
D6973	64.0	45.7	65	35	0	12.3	49.8	92	3
D7057	63.5	45.4	38	60	2	11.9	50.8	93	4
D7067	64.0	46.5	63	35	2	12.9	52.2	94	4
D7075	62.5	42.2	58	42	0	12.6	52.4	94	4
D70101	64.5	49.3	60	38	2	12.6	52.3	89	2
DT 316	62.5	44.4	42	58	0	12.6	49.5	91	3
DT 332	64.0	51.1	73	27	0	12.0	51.1	94	4

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 23

QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

NORTH DAKOTA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	%	%	%	%	%	%		
<u>Williston</u>									
Hercules	62.5	46.7	64	35	1	14.6	49.3	89	3
Leeds	64.0	40.5	49	50	1	14.7	48.6	91	4
Mindum	63.0	43.1	55	44	1	13.6	49.8	86	2
Rolette	64.0	47.4	67	32	1	14.8	50.0	87	2
Ward	63.0	45.0	64	35	1	14.8	50.0	93	4
Wascana	62.0	48.1	69	30	1	13.6	49.1	95	4
Wells	63.5	26.4	31	65	4	12.9	50.0	90	3
D6676	63.5	42.6	55	44	1	14.3	50.2	91	4
D6714	63.0	46.7	61	38	1	14.1	50.7	90	4
D6715	63.5	45.8	59	39	2	14.3	50.7	91	4
D6721	63.5	44.4	59	40	1	14.1	51.6	89	3
D6722	62.5	45.0	57	42	1	14.7	50.5	92	4
D6733	64.0	41.3	52	46	2	14.5	49.8	91	4
D6761	63.0	44.4	53	46	1	14.0	49.8	91	4
D692	64.0	43.7	57	42	1	14.1	50.2	94	4
D6915	63.5	43.5	63	36	1	14.5	49.8	88	3
D6962	64.0	42.9	59	40	1	13.3	50.0	91	4
D6973	63.0	46.1	71	28	1	14.5	47.5	90	3
D7057	63.5	42.9	53	46	1	12.2	50.0	95	4
D7067	64.0	44.2	65	34	1	14.0	48.2	92	4
D7075	62.5	39.8	58	41	1	14.2	50.2	92	4
D70101	63.5	48.3	67	32	1	14.6	51.2	90	3
DT 316	62.5	42.9	42	57	1	14.5	47.7	92	4
DT 332	63.0	48.1	75	24	1	14.5	48.4	95	4

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 24

QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

SOUTH DAKOTA

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. Pro. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	Lg.	Med.	Sm.	%	%	%	
<u>Selby</u>									
Hercules	59.0	34.6	15	80	5	16.0	50.5	93	4
Leeds	61.5	32.5	4	91	5	17.1	52.1	95	4
Mindum	59.5	27.8	3	86	11	17.3	50.5	90	2
Rolette	61.0	39.4	11	83	6	15.9	54.0	93	4
Ward	59.5	35.8	5	88	7	16.6	50.5	94	4
Wascana	58.5	35.1	9	85	6	17.0	52.1	97	3
Wells	60.5	28.7	3	86	11	15.6	51.2	94	4
D6676	60.5	33.9	4	90	6	16.4	51.2	95	4
D6714	59.0	34.4	4	90	6	16.7	52.3	94	4
D6715	60.0	35.7	6	89	5	16.1	50.2	94	4
D6721	60.5	37.6	9	85	6	15.7	53.2	94	4
D6722	60.0	34.0	6	88	6	16.4	50.5	95	4
D6733	60.5	33.1	4	91	5	17.1	52.8	95	4
D6761	60.0	36.5	6	89	5	16.3	50.5	94	4
D692	60.5	33.9	4	89	7	16.3	50.2	95	4
D6915	60.0	34.6	5	90	5	15.6	49.1	93	4
D6962	60.5	33.3	3	91	6	16.6	51.2	96	4
D6973	60.5	33.9	9	86	5	16.8	51.6	95	4
D7057	58.5	29.8	1	89	10	16.5	50.7	95	3
D7067	60.5	38.6	25	72	3	15.4	52.8	95	4
D7075	59.5	32.1	7	88	5	17.1	50.9	96	4
D70101	59.5	35.1	5	89	6	17.1	51.2	94	4
DT 316	58.5	30.6	1	92	7	17.4	48.1	94	3
DT 332	58.5	36.2	17	78	5	16.4	48.6	96	3

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.

TABLE 25

QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

WASHINGTON

1972 CROP

Variety or State Sel. No.	T.W. <u>1/</u>	1000 Kwt.	Kernel Size			Wht. <u>2/</u>	Pur. Semo. <u>3/</u>	Dust Color Score <u>4/</u>	Gen. Eval. <u>5/</u>
	#/Bu.	g.	%	%	%	%	%		
<u>Royal Slope</u>									
Hercules	62.0	45.5	65	34	1	14.5	52.3	88	3
Leeds	63.0	41.3	51	46	3	15.2	50.0	90	4
Mindum	62.0	40.7	44	52	4	13.2	50.5	87	3
Ward	62.5	47.4	65	32	3	12.2	50.7	93	4
Wascania	60.0	49.3	68	29	3	13.2	50.2	96	4
Wells	60.5	34.4	34	58	8	14.5	48.8	93	4
D6517	64.5	53.8	79	20	1	13.0	50.9	89	3
D6647	64.0	47.6	65	33	2	11.3	53.3	90	4
D6676	64.0	47.1	65	33	2	13.3	50.2	94	4
D6714	61.5	44.4	54	42	4	13.1	48.4	91	4
D6715	62.0	44.2	53	43	4	12.6	49.1	91	4
D6718	62.5	43.7	58	39	3	13.6	48.4	92	4
D6721	62.0	44.4	55	41	4	13.0	51.4	92	4
D6722	62.5	44.8	59	38	3	13.4	49.8	93	4
D6723	62.5	46.5	65	32	3	13.2	51.4	91	4
D6733	62.0	40.8	45	52	3	13.7	49.5	91	4
D6761	62.0	42.6	53	45	2	13.9	49.8	94	4
D6821	63.0	45.8	53	44	3	12.9	51.4	89	3
D6838	62.0	41.0	49	49	2	13.9	52.1	93	4
D6876	64.0	46.1	74	25	1	14.0	51.2	91	4
D6878	64.0	45.8	70	28	2	14.0	52.1	95	4
Plot #18	62.5	50.3	72	27	1	15.1	49.5	87	2

1/ Unofficial2/ 14% Moisture Basis3/ Purified4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 86.5/ 1 = No Promise, 2 = Little Promise, 3 = Some Promise, 4 = Good Promise.



